CLAIMS:

We claim:

1.   A voice application simulation method comprising the steps of:

loading a user simulation script programmed to specify simulated voice

interactions with the voice application;

deriving from the voice application a nominal output;

generating a simulated output for the voice application corresponding to the

nominal output; and

conditionally producing a varying simulated input for the voice application.

2.   A method for simulating a dynamic run-time user interaction with a voice application, said method comprising the steps of:

loading a user simulation script programmed to specify simulated voice interactions with the voice application;

deriving from the voice application a nominal output;

generating a simulated output for the voice application corresponding to the nominal output;

generating a first simulated input for the voice application corresponding to a first pre-determined user input to the voice application, if the nominal output satisfies a first condition; and

generating a second simulated input for the voice application corresponding to a second pre-determined user input to the voice application, if the nominal output satisfies a second condition different from the first condition.

3.   The method of claim 2,

wherein the user simulation script is specified in a customized mark-up language, the customized mark-up language having a set of one or more conditional tags.

4.   The method of claim 3,

wherein the customized mark-up language includes an internal variable for nominal output of the voice application.

5.   The method of claim 4, further comprising the steps of:

setting the internal variable to equal the nominal output of the voice application;

resolving a first conditional statement using a first conditional tag to generate the

first simulated input if the internal variable equals a first nominal output of the voice

application; and

resolving a second conditional statement using a second conditional tag to

generate the second simulated input if the internal variable equals a second nominal

output of the voice application.

6.   A machine readable storage having stored thereon a computer program for simulating a dynamic run-time user interaction with a voice application, said computer program comprising a routine set of instructions which when executed by a machine cause the machine to perform the steps of:

loading a user simulation script programmed to specify simulated voice interactions with the voice application;

deriving from the voice application a nominal output;

generating a simulated output for the voice application corresponding to the nominal output;

generating a first simulated input for the voice application corresponding to a first pre-determined user input to the voice application, if the nominal output satisfies a first condition; and

generating a second simulated input for the voice application corresponding to a second pre-determined user input to the voice application, if the nominal output satisfies a second condition different from the first condition.

7.   The machine readable storage of claim 6,

wherein the user simulation script is specified in a customized mark-up language, the customized mark-up language having a set of one or more conditional tags.

8.   The machine readable storage claim 7,

wherein the customized mark-up language includes an internal variable for nominal output of the voice application.

9.   The machine readable storage claim 8, further causing said machine to perform the steps of:

setting the internal variable to equal the nominal output of the voice application;

resolving a first conditional statement using a first conditional tag to generate the first simulated input if the internal variable equals a first nominal output of the voice application; and

resolving a second conditional statement using a second conditional tag to generate the second simulated input if the internal variable equals a second nominal output of the voice application.

10.   A simulation tool for simulating a dynamic run-time user interaction with a voice application running on an application server, said tool being configured to load a user simulation script programmed to specify simulated voice interactions with the voice application, and to: (i) process the voice application to derive a nominal output of the voice application; (ii) process the user simulation script to generate a simulated output for the voice application corresponding to the nominal output; (iii) process the user simulation script to generate a first simulated input for the voice application corresponding to a first pre-determined user input to the voice application, if the nominal output satisfies a first condition; and (iv) process the user simulation script to generate a second simulated input for the voice application corresponding to a second pre-determined user input to the voice application, if the nominal output satisfies a second condition different from the first condition.

11. The simulation tool of claim 10,

wherein the user simulation script is specified in a customized mark-up language, the customized mark-up language having a set of one or more conditional tags.

12. The simulation tool of claim 11,

wherein the customized mark-up language includes an internal variable for nominal output of the voice application.

13. The simulation tool of claim 12,

wherein the simulation tool is further configured to: (i) set the internal variable to equal the nominal output of the voice application; (ii) resolve a first conditional statement using a first conditional tag to generate the first simulated input if the internal variable equals a first nominal output of the voice application; and (iii) resolve a second conditional statement using a second conditional tag to generate the second simulated input if the internal variable equals a second nominal output of the voice application.